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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,887	02/11/2004	Colin Temple	HES 2003-IP-009967U1P1	3325

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EXAMINER	
TUCKER, PHILIP C	
ART UNIT	PAPER NUMBER
1712	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/776,887	TEMPLE ET AL.	
	Examiner	Art Unit	
	Philip C. Tucker	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-19,21-28,30,32-42,44,56,58-73,82,83 and 85-111* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-12,14,15,17,19,21-28,30,32-42,44,56,58-72,82,83,85-93 and 95-110* is/are rejected.

7)☒ Claim(s) *13,16,18,73,94 and 111* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/22/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 30, 32, 36, 38-40, 56, 62, 64, 65, 70, 71, 72, 82, 83, 95, 100, 102, 103, 108-110 are rejected under 35 U.S.C. 102(a or b) as being anticipated by ViviPrint 540 Homopolymer – Technical Data Sheet – date uncertain.

ViviPrint teaches a nanometer source of polyvinylpyrrolidone at a concentration of 10% in water. Applicants intended use as a drilling fluid does not distinguish (In re Pearson 181 USPQ 641). With respect to claim 30, since water can be used as a drilling fluid no distinction is seen.

Applicant supplied the document but did not provide a date of publication, it is thus not certain if such qualifies as a or b art under 35 USC 102.

3. Claims 30, 36, 38-40, 56, 64-70, 72, 82, 83, 95, 102-108, 110 are rejected under 35 U.S.C. 102(e) as being anticipated by Nohr (US 2002/0149656).

Nohr teaches a fluid which comprises water, a silica-polyvinylpyrrolidone nanoparticle and sodium chloride (see example 30). The salt would also act as a weighting agent, as in claim 69. The coated particle is still in the form of a nano particle, and would thus be encompassed by the polyvinyl pyrrolidone nanoparticle source as claimed herein. Applicants intended use as a drilling fluid does not distinguish (In re Pearson 181 USPQ 641). With respect to claim 30, since water can be used as a drilling fluid no distinction is seen.

4. Claims 30, 32, 36-40, 56, 58, 62-72, 82, 83, 95, 96, 100-110 are rejected under 35 U.S.C. 102(b) as being anticipated by Maitra (5874111).

Maitra teaches a fluid which is made by crosslinking and polymerizing vinylpyrrolidone. Such may be either in water or hexane, and a calcium chloride salt may be added to the aqueous dispersion of crosslinked polymer in water (see Example 1). The calcium chloride is also a weighting agent. Applicants intended use as a drilling fluid does not distinguish (In re Pearson 181 USPQ 641). With respect to claim 30, since water can be used as a drilling fluid no distinction is seen.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3-12, 14, 15, 17, 19, 21-28, 30-42, 44, 56, 58-67, 69, 70, 72, 82, 83, 85-93, 95-105, 107, 108 and 110 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/183122. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the claims of 11/183122 differ in teaching a silicate, such claims teach the same drilling fluid comprsing the same nanoparticle source, and thus would render the fluid and drilling method of the present claims obvious to one of ordinary skill in the art. Styrene-butadiene latexes are the most common type of latexes, and would be obvious to one of ordinary skill in the art to use in view of the teaching of latex in the claims of 11/183122.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1, 3-12, 14, 15, 17, 19, 21-28, 30-42, 44, 56, 58-67, 69, 70, 72, 82, 83, 85-93, 95-105, 107, 108 and 110 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 11/183113. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the claims of 11/183113 differ in teaching a silicate, such claims teach the same drilling method comprsing the same nanoparticle source, and thus would render the fluid and drilling method of the present claims obvious to one of ordinary skill in the art. Styrene-butadiene latexes are the most common type of latexes, and would be obvious to one of ordinary skill in the art to use in view of the teaching of latex in the claims of 11/183113. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 13, 16, 18, 73, 94 and 111 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Applicant's arguments have been considered but are not deemed fully persuasive. Applicant's amendment has overcome the rejections over Stowe, Maroy, Jiminez and Baran, which fail to teach a polyvinyl pyrrolidone nanoparticle source as in the present claims. With respect to the other eferences, applicant has argued that the amendment such that the fluid is formulated for use in drilling a subterranean formation

is distinguishing. Such is not distinguishing, absent further definition of the formulation, since water can be used as a drilling fluid, although it may be a poor one in certain circumstances. Since such is true, claim 30 is also rejected herein. With respect to Nohr, when the silica particle is coated with the polyvinyl pyrrolidone, the resulting particle is still a nanoparticle. Such nanoparticle containing polyvinylpyrrolidone is not seen to be distinguished from the nanoparticle source or nanoparticle of the present claims, since the resulting particles are in nanoparticle form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-4119